

wherein the electrolyte composition in the coating step is in a sol state,

wherein the electrolyte composition contains an electrolyte salt, a matrix polymer, and a swelling solvent, and

wherein the matrix polymer is further defined as being selected from the group consisting of polyvinylidene fluoride, polyhexafluoropropylene, polyethylene oxide, polypropylene oxide, polyphosphazene, polysiloxane, polyvinyl acetate, polyvinyl alcohol, polymethyl methacrylate, polyacrylic acid, polymethacrylic acid, styrene-butadiene rubber, nitrile-butadiene rubber, and polycarbonate.

21. (Amended) An electrode produced by the method of Claim 1, wherein:

the electrolyte composition in the coating step is in a sol state,

the electrolyte composition contains an electrolyte salt, a matrix polymer, and a swelling solvent, and

the matrix polymer is further defined as being selected from the group consisting of polyvinylidene fluoride, polyhexafluoropropylene, polyethylene oxide, polypropylene oxide, polyphosphazene, polysiloxane, polyvinyl acetate, polyvinyl alcohol, polymethyl methacrylate, polyacrylic acid, polymethacrylic acid, styrene-butadiene rubber, nitrile-butadiene rubber, and polycarbonate.

22. (Amended) A gel electrolyte cell comprising the electrode of Claim 21.

23. (Amended) A gel electrolyte cell of Claim 22, wherein the positive electrode and the negative electrode are cut into predetermined lengths, and attached to each other so that the gel electrolyte film faces to each other, and rolled in a longitudinal direction, and packed in an exterior film made from an insulation material.

24. (Amended) A gel electrolyte cell of Claim 23, wherein a positive electrode lead is welded on the positive electrode and a negative electrode lead is welded on the negative electrode, and these leads protrude through at least one seal portion of the exterior film.

Please cancel claims 12, 13, and 15.